

Remote Access Solutions for Case Management Systems

Consistent with the goal of providing high-quality legal services to clients, legal aid organizations seek to improve the management of case work handled by their attorneys. A Case Management System (CMS) is a software package which helps to organize relevant case data, and legal resources to improve the delivery of legal assistance to clients. In this inquiry, we look at several CMSs and evaluate how remote access can be delivered, and what precautions are required to ensure the confidentiality of case data.

When we say remote access, we are generally talking about Internet technologies, but more specifically we are referring to three options. The first option is to web-enable the application; that is, to provide access to the application via a standard web browser. In the past this was a major effort, as most applications were built before the web became a popular application platform. These days, most workgroup applications now either have a secondary web interface, or were designed originally to provide access via a web browser. The second option is to use Citrix to provide users with a remote view of the application. This option generally allows the most application features for end users, but may be cost prohibitive for small installations. The third option is to use a dial-up or VPN (Virtual Private Network) connection to allow the client application to communicate with the server software. This option allows for clients to use the application in a limited connectivity scenario, but can be the most complex and error-prone.

Unfortunately, there is no universal formula to determine which CMS we will discuss is best suited to a particular remote access solution, however we will review each solution with each CMS to help show how the remote access solutions fit, and what advantages may come from using other solutions.

Let's take a look at the remote access solutions in depth:

Web-enabled

A web-enabled application is traditionally build in three tiers, a database backend, a web front-end, and a custom application which binds the two. This custom “middleware” is the meat of the application, and generally is built with a specialized web programming language, such as asp, cold fusion or php. The strengths of a web-enabled application include universal accessibility, and platform independence. Any modern computer includes internet capability, and a web browser suitable for accessing a web application.

Citrix (remote viewing)

An application which is provided via Citrix can be any application which is accessible from a windows PC. Citrix is a remote viewing product which allows a client to run an application remotely on the Citrix server, with all data stored on the remote server or network; but still have the application displayed on the client computer. The primary advantages of Citrix is that a client can easily use an application which has demanding system requirements and/or complex client-side configuration, but the client machine only needs Internet access and the Citrix client software. The application administrator also has very tight control over the applications configuration, and can easily provide new clients with access to the application. A reduced feature version of Citrix comes with Windows 2000/2003 server, and provides remote users with a view of the “remote desktop” on the server. This lets administrators provide similar functionality, but at a much lower cost.

Dial-up & VPN connections

A client using these access methods is replicating the native client environment, that is, using dial-up or VPN software connects directly to the company's network. This gives the remote system a direct link to the server, and requires that the remote system be fully configured to use the application, just as a desktop system requires. The primary advantages are cost and flexibility. In limited-budget scenarios, complex applications can still be provided to remote users. The major downsides are speed, access is generally very slow, and a major security risk is introduced to the company's network. If the remote PC becomes infected with a virus or hacked, the virus/intruder will have full access to the company's network whenever this connection is active.

Case Management Systems:

1. CASS

CASS is a client/server application which uses a native windows application to connect directly to the SQL database which stores the case data. Client/server apps generally are designed for a LAN environment, and will assume that the database is connected on a fast local network. This makes direct remote access slow, as most WAN (Internet & Dial-up) connections cannot handle LAN sized data flows in a responsive manner. CASS also has a web interface, but most environments will be using the original client/server application. Additionally CASS uses direct database access for reporting, so the web interface does not provide access to the reporting features.

2. Clients for Windows

Clients for Windows is the most common CMS in use, primarily because it is one of the oldest of the group. It has both a client/server application and a web interface. Both have been available for several years, and so use is mixed among programs. The web interface is provided as a service, rather than a product, so while the vendor allows for customization, programs are limited in how they can configure the web interface. It also requires the installation of small applet to work properly. This prevents universal access via the web, but can provide an element of security, as only properly configured systems can access it.

3. Legal Files

Legal Files is a mature client/server application which connects directly to the SQL database. As with any client/server application, it will perform best in a LAN environment, and performance over a WAN connection may be degraded. Alternately, the web interface provides full functionality, which is provided via add-on modules to the base product. The web interface can be customized as needed.

4. Legal Server

Legal Server has been designed from the start as a web application. The user interface is via a web browser, all features are available via the web, and so are accessible from any pc. This ensures universal access, but makes web server security an important issue. Although it is a packaged product installed on your own server, the vendor manages the server installation including the operating system and database.

5. Pika

Pika has been designed from the start as a web application. User access is provided via any standard web browser and all features are available via the web. This ensures universal access, but makes web server security an important issue. The vendor offers an ASP (Application Service Provider) option, where they run the application on their own server, and manage the server installation. Users can access the application over the Internet. The software is fully customizable as a packaged product or with the ASP option.

6. Practice Manager

As one of the older systems, Practice Manager was designed as a client/server system. It uses MS SQL server to store data on the server, and the client application runs on a standard windows desktop. It performs best in a LAN environment, and the vendor recommends that remote users use Citrix or remote desktop, rather than a VPN or dial-up connection. A web interface is available, although it provides limited features as compared to the standard client application. The vendor offers an ASP (Application Service Provider) option, where they run the application on their own server, and manage the server installation. Users access the server using either the Citrix or remote desktop client, which requires a fast internet connection to handle multiple connections.

7. ProLaw

ProLaw is a client/server system which uses MS SQL or SyBase and a standard windows client application. As a client/server application, it works best in a LAN environment, and WAN use should be limited to high-speed environments. ProLaw is a mature CMS, and provides many features, including integration with various office productivity tools. While there is a web interface which provides access to important features, it offers limited features as compared to the standard client application. The vendor encourages sites to only use the web interface for remote access or for allowing clients to view/submit selected case information.

8. TIME

The time CMS is a client/server system. It uses a standard windows application, and a SQL database to store data. It is optimized for LAN environments, although the vendor claims that it performs well even in low-speed WAN environments. There is no web interface to TIME, so remote access options exclude access from a web browser.